



TENNESSEE DEPARTMENT OF

**EDUCATION**

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## Emergency Preparedness

<b>Primary Career Cluster:</b>	Law, Public Safety, Corrections & Security
<b>Consultant:</b>	Amy F. Howell, (615) 532-2839, <a href="mailto:Amy.F.Howell@tn.gov">Amy.F.Howell@tn.gov</a>
<b>Course Code(s):</b>	6151
<b>Prerequisite(s):</b>	None
<b>Credit:</b>	1
<b>Grade Level:</b>	9-10
<b>Graduation Requirements:</b>	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Health Science or Law, Public Safety, Corrections & Security courses.
<b>Programs of Study and Sequence:</b>	This is the first or second course in the Public Health program of study and the second course in the Emergency Services and Fire Management Services programs of study.
<b>Aligned Student Organization(s):</b>	HOSA: <a href="http://www.tennesseehosa.org">http://www.tennesseehosa.org</a> Amanda Hodges, (615) 532-6270, <a href="mailto:Amanda.Hodges@tn.gov">Amanda.Hodges@tn.gov</a> SkillsUSA: <a href="http://www.tnskillsusa.com/">http://www.tnskillsusa.com/</a> Brandon Hudson, (615) 532-2804, <a href="mailto:Brandon.Hudson@tn.gov">Brandon.Hudson@tn.gov</a>
<b>Coordinating Work-Based Learning:</b>	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit <a href="http://tn.gov/education/cte/work_based_learning.shtml">http://tn.gov/education/cte/work_based_learning.shtml</a> .
<b>Available Student Industry Certifications:</b>	None
<b>Dual Credit or Dual Enrollment Opportunities:</b>	There are no statewide dual credit/dual enrollment opportunities for this course. If interested in establishing a local opportunity, reach out to your local postsecondary institution.
<b>Teacher Endorsement(s):</b>	577, 590, 720, 722, 750, 751
<b>Required Teacher Certifications/Training:</b>	None
<b>Teacher Resources:</b>	<a href="http://www.tn.gov/education/cte/HealthScience.shtml">http://www.tn.gov/education/cte/HealthScience.shtml</a> <a href="http://www.tn.gov/education/cte/LawPublicSafetyCorrectionsSecurity.shtml">http://www.tn.gov/education/cte/LawPublicSafetyCorrectionsSecurity.shtml</a>

## Course Description

*Emergency Preparedness* provides an overview of the involvement of public safety professionals and healthcare professionals in the response to various natural and unnatural emergencies. Upon completion of this course, proficient students will be able to identify the magnitude of a natural or unnatural disaster and its effects on the many facets of communities. This course equips students with the skills and knowledge surrounding a Community Emergency Response Team (CERT) and teaches them how to apply those skills in a mock disaster scenario. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects.\*

## Program of Study Application

This is the first or second course in the *Public Health* program of study and the second course in the *Emergency Services* and *Fire Management Services* programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the respective career cluster website:

- Health Science: <http://www.tn.gov/education/cte/HealthScience.shtml>
- Law, Public Safety, Corrections, & Security: <http://www.tn.gov/education/cte/LawPublicSafetyCorrectionsSecurity.shtml>

## Course Standards

### Disasters and Emergency Preparedness

- 1) Define the features of a disaster. Differentiate among environmental/natural disasters, acts of terrorism, and technological hazards, citing real-life examples found in news media, and describe how each impacts the health and stability of communities. Accurately identify appropriate local, state and national agencies that could respond in each type of disaster. (TN Reading 2, 5, 9; TN Writing 4, 8, 9)
- 2) Identify the most common disasters in Tennessee and compare those findings with the prevalence of similar disasters nationwide. Prepare an informational artifact or graphic illustration\*\* to share information associated with preparing for the disaster, hazards common to the disaster, and associated dangers to first responders and other community agency employees. Develop a family disaster plan with evacuation strategies, available community assistance, and provisions for the care of pets and livestock. (TN Reading 9; TN Writing 4, 9)
- 3) Articulate important historical events and milestones (such as the creation of the Department of Homeland Security) impacting evolution of present-day emergency preparedness systems in the United States. Use a timeline or other graphic to illustrate the major developments from the colonial period to today, citing specific textual evidence from research. (TN Reading 1, 2, 7; TN Writing 2, 9)
- 4) Using federal, state and local government websites, research the statutes, laws, and regulations related to emergency preparedness. Describe the hierarchy of those regulations in relation to the agencies and populations they govern, citing specific textual evidence from research. (TN Reading 1, 2, 5; TN Writing 4, 8)

- 5) Create a public service announcement, community education portfolio, presentation, fact sheet series, or guidebook for citizens of the local community that describes important steps to prepare for a disaster. Topics should include, but are not limited to:
- a. Identifying community laws and policies
  - b. Understanding community alerts and warning systems
  - c. Establishing priorities accurately
  - d. Devising a communication plan involving community members, local private and public agencies, healthcare facilities, local HAM radio clubs, and emergency agencies
  - e. Locating available resources
  - f. Recognizing the characteristics and potential consequences of safety hazards
  - g. Developing an evacuation plan
  - h. Outlining components of practice drills
  - i. Describing process of “sheltering in place”
- (TN Reading 2; TN Writing 4)

### **Emergency Response Organizations and Personnel**

- 6) Compile a list of federal, state, and local government and civilian response agencies and organizations involved in disaster response (such as Medical Reserve Corp and Federal Emergency Management Agency). Analyze the structure of the relationships among organizations and describe how each organization operates when responding to disasters. Accurately describe Incident Command Systems and how they coordinate relief efforts within and between agencies. (TN Reading 2, 5; TN Writing 4, 8, 9)
- 7) Research local and state agency information to determine how civilians can participate in disaster response. Produce a Public Service Announcement explaining the ways civilians can be involved, including detailed information on the emergency response training required, such as First Aid, Cardiopulmonary Resuscitation (CPR), Community Emergency Response Team (CERT), and others. (TN Reading 2, 7; TN Writing 4, 7, 9)

### **Hazard Identification/Control**

- 8) Describe how a disaster can impact a community’s infrastructure. Identify hazards associated with structural damage from disasters and explain, using a graphic illustration, how they can be addressed in an emergency situation. (TN Reading 2; TN Writing 4)
- 9) Identify hazards associated with fires and utilities in a disaster. Outline the nine steps of a CERT Size-up when looking for fire or utility hazards, and locate vulnerable areas in a school or other community building. Prepare a plan for dealing with these hazards, including guidelines for maintaining personal safety. Compile information on all public and private companies and/or agencies in the area available to assist with hazard control. (TN Reading 3, 4; TN Writing 2, 4, 9)
- 10) Create a disaster guide for community members in a specific public building, outlining the following: primary and secondary exits from the building; designated gathering places in the event of an emergency; procedures to be followed; and any other essential instructions or information. (TN Writing 4, 9)

- 11) For a given structure in the community, create a map to identify where all firefighting equipment and utility shut-offs are located throughout the building. Conduct a research project on fire hazards and safety equipment that culminates in the creation of an informational essay describing fire chemistry, the classification of fires, selection of the proper fire extinguisher, and fire suppression safety. (TN Reading 4; TN Writing 2, 4, 7, 9)

### **Disaster Medical Operations**

- 12) Research and summarize, with a detailed description, plans for Disaster Medical Operations in a community during a given disaster situation. List public health considerations that must be addressed. Define and explain how each of the five major functions of a disaster medical operation will be addressed and by whom:
- a. Triage
  - b. Treatment
  - c. Transport
  - d. Morgue
  - e. Supply
- (TN Reading 2, 5; TN Writing 4, 7, 9)
- 13) Outline the Simple Triage and Rapid Treatment (START) strategy for the first responders to a disaster scene. Include the safety measures, priority classifications, and designations (Immediate, Delayed, Minor, Dead) and create a triage decision flow chart. (TN Reading 2, 5; TN Writing 4, 7, 9)
- 14) Accurately assess (students cannot diagnose) and demonstrate immediate treatment protocols for:
- a. Airway obstruction
  - b. Bleeding
  - c. Shock
- (TN Reading 3, 4)
- 15) Conduct a Head-To-Toe Assessment. Demonstrate skills in basic first aid and cardiopulmonary resuscitation (CPR). Document findings and provide treatment such as:
- a. Achieve certification in cardiopulmonary resuscitation (CPR)
  - b. Demonstrate stabilization of neck, spine, or head injury
  - c. Classify and treat burns
  - d. Provide care of wounds and/or amputations
  - e. Stabilize fractures, dislocations, sprains, and strains
  - f. Alleviate hypo/hyperthermia
- (TN Reading 3; TN Writing 4)

## **Search and Rescue Operations**

- 16) Summarize findings from government websites and/or interviews with members of a search and rescue organization. Create guidelines for conducting both interior and exterior searches at a disaster site that describes the relationships among important concepts of search and rescue. State the purpose of a search and rescue team. Describe all safety precautions that should be taken to protect the searchers including the completion of a CERT Size-up to identify potential hazards. (TN Reading 2, 5; TN Writing 4, 7, 9)
- 17) Role-play the skills and protocol involved in disaster search and rescue procedures. Describe and perform the procedure for marking buildings that have been searched. (TN Reading 3)
- 18) Demonstrate methods used for conducting rescue operations when a victim is found in rubble and unstable environments. Practice emergency and non-emergency moves for victims who are not mobile and those suspected to have head or spine injuries. (TN Reading 3; IFSTA; EMR)

## **Disaster Psychology**

- 19) Synthesize research to produce an informational essay describing measures that disaster team members can take to protect themselves from psychological trauma in a disaster. Examine each of the following:
  - a. Survivors trauma
  - b. Traumatic crisis
  - c. Mediating factors
  - d. Methods for on-scene psychological intervention: empathetic listening, what not to say, informing family and friends of a death(TN Reading 1, 2; TN Writing 2, 4, 8, 9)
- 20) Identify best practices for emergency personnel to maintain their own mental health and reduce personal stress levels during a disaster or emergency situation. Prepare an informational report outlining these practices. Describe ways to recognize stress amongst team members and practice research-based methods for assisting peers in alleviating stress. (TN Reading 1, 2; TN Writing 2, 4, 7, 9)

## **Emergency Response Planning and Prevention**

- 21) Investigate the guidelines governing youth CERT teams regionally and nationally. Utilizing skills and competencies from Emergency Preparedness, Disaster Medical Operations, Hazards Identification, Search and Rescue, and Disaster Psychology, work in a team to create a comprehensive school emergency preparedness student plan, in conjunction with the school administration. Identify roles and responsibilities for all team members. Compare and align guidelines with the school disaster plan, if applicable. Include information on the following:
  - a. Incident Command System
  - b. On-scene management
  - c. Protocols for specific types of disasters and responses
  - d. Communication procedures
  - e. Resource management plans
  - f. Drills and training

- g. National Incident Management System (NIMS) compliance, at least IS-700, IS-800, ICS-100
  - h. Mobilization guidelines
  - i. Forms and documentation
  - j. Protocols for dealing with the media
  - k. Participation in community disaster incidents beyond the school
- (TN Reading 2, 9; TN Writing 4, 7, 9)

22) Participate in a Mock Disaster Drill. Involve community emergency preparedness personnel if possible to help design and set up the scenarios for various stations and observe teams at work during the actual drill to evaluate the responses. Conduct a post drill review to collect feedback from observers and team members. Craft an informational essay evaluation of expertise and areas in need of improvement through further training. Design a plan to provide team members with that training. (TN Reading 2, 9; TN Writing 4, 7, 9)

## Standards Alignment Notes

\*References to other standards include:

- TN Reading: [State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects](#); Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).
  - Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standards 6, 8, and 10 at the conclusion of the course.
- TN Writing: [State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects](#); Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
  - Note: While not directly aligned to one specific standard, students who are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 5 and 10 at the conclusion of the course.
- IFSTA: [International Fire Service Training Association](#)
- EMR: [National Emergency Medical Services Educational Standards](#) for Emergency Medical Responders
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

\*\*Informational artifacts include, but are not limited to, graphic organizers, brochures, posters, fact sheets, narratives, essays, and presentations. Graphic illustrations include, but are not limited, to charts, tables, graphs, rubrics, drawings, and models.